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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,501	04/22/2004	Takateru Imai	82643	6961

22242 7590 09/21/2005

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EXAMINER

KORNAKOV, MICHAIL

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/829,501

Applicant(s)

IMAI ET AL.

Examiner

Michael Kornakov

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-11, 16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-11, 16 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/939,388.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Double Patenting***

1. Claims 16, 17 of this application conflict with claims 16, 17 of Application No. 10/829,502. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.
2. Claims 1-8 and 12-15 are cancelled in the communication filed 02/22/2004.
3. Claims 9-11 and 16, 17 are examined on the merits.

### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
5. Claims 9-11 are rejected under 35 U.S.C. §101 because these claims are directed to neither a "process" nor a "machine," but rather embrace or overlap two different statutory classes of invention set forth in 35 U.S.C. §101, which is drafted so as to set forth the statutory classes of invention in the alternative only.

Each one of claims 9-11 is a "hybrid claim", which is rejected both by 101, or 112, second in a circumstance when a "hybrid claim" contains more than one statutory invention, and is indefinite because it fails to recite the boundaries sought for protection. It is unclear how the method limitations further limit or define the structure of apparatus.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A single claim that claims both an apparatus and the method steps of using it is indefinite under 35 U.S.C. 112, second paragraph. See *Ex Parte Lyell*, 17 USPQ 2d 1548 (Bd. Pat. App. 7 Inter.1990). Such claims should also be rejected under 35 USC 101, because the claim embraces or overlaps two different statutory invention

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1746

9. Claims 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Scarola et al (U.S. 5,443,652).

Scarola discloses an apparatus for the cleaning of plastic flakes to be recycled. With regard to the cleaning device of the instant claims 16, 17, the vessel of Scarola has an entrance port for the resinous product entrance provided in the upper area of one end of the vessel and an exit port for the resin in the lower part of the container (see positions 205 and 206 on Fig.3 and col.7, lines 55-65), it has a water supply port and a drainage port (col.8, lines 21-30 and positions 306, 307, 313 on Fig.4). The rotary body having rotary shaft is in col.2, lines 15-20 (paragraph b), col.4, lines 40-45,) several agitating blades are exemplified in Example 1 in col.9, see also Fig.1, 2, 4. It is understood that the surfaces disclosed by Scarola are rough surfaces buy the virtue of used materials. In some embodiments both the entrance port and port for water supply are on the upper part of the vessel, while the exit port and the drainage port are on the lower [part of the cleaning vessel (col. 2, lines 23-29, 55-60, col.5, lines 36-40, especially, Fig. 3 and col.7, lines 55-68). Scarola teaches that smaller distances between the wall and the tip of the agitator blade increases the level of shear created by the blade and also increases the level of abrasion created when the plastic flakes strike the wall. The closer the tip of the agitator blades are to the wall of the vessel, the more efficient the abrasion, thus making the walls of the vessel abrasive or *roughened*.

10. Claims 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Peterson (U.S. 5,365,075).

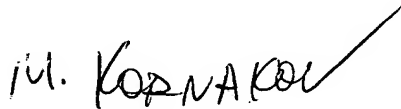
Peterson discloses an apparatus for automated identification of recycled plastic articles with comparison of direct and diffuse transmitted light, comprising a light source and an array of detectors positioned in a manner such as to allow simultaneous measurement of a directly transmitted light signal and a diffused light signal, the signals are compared and used to differentiation of recycled resinous material (abstract). . The device of Peterson comprises a conveyor 12 on Fig.1, wherein the sample of crushed polymer(1) for identification is located. On Fig.1 it is also illustrated that when the object undergoes scanning a direct light beam and a detector positioned opposite the light source and the detector positioned at an oblique angle to the light path. (see col.4, lines 1-10). Again referring to FIG. 1, the light source 14 was placed approximately 20 inches from the plane of motion of the article being scanned. Light collimator 16 was a conventional lens (reads a stopper member having a light window). Light source 14 and through light detector 18 were arranged such that light beam 22 was substantially perpendicular to the plane of motion of the article being scanned. Diffuse light detector 20 was assembled similar to the through-light detector, except no neutral density filters were used. (col.5, lines 43-67, col.6, lines 1-20, Fig.1).

Taking into account the ambiguity and indefiniteness of claims 9-11, the device of Peterson is readable on the device of the instant claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kornakov whose telephone number is (571) 272-1303. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "M. Kornakov", with a long diagonal stroke extending upwards and to the right.

Michael Kornakov  
Primary Examiner  
Art Unit 1746

9/17/2005